

MAKHNEV, I.F.; BABUSHKIN, A.K.; SHTEYNDLIN, B.Ye.; OSTOLOPOVSKIY, A.N.

Concerning N.S.Lebedev's article "Standardization of forge
furnaces." Kuz.-shtam.proizv. 5 no.5:38-41 My '63.
(MIRA 16:9)

SOLOVYOV, G.V.; BABUSHKIN, A.M.

Rapid crosscutting at the No.3-3a Mine in the Kuznetsk Basin.
Ugol' 39 no.5:28-30 My '64. (MIRA 17:8)

BABUSHKIN, Aleksey Nikitovich; SOKOLOV, V.K., red.; PETERSON, A.K., tekhred.

[Bryansk Province; geography and economic history] Brianskaya
oblast'; geograficheskii i istoriko-ekonomicheskii ocherk.
Izd-vo "Brianskii rabochii," 1958. 375 p., maps. (MIRA 12:2)
(Bryansk Province--Economic conditions)

BABUSHKIN, A. P.

"A Method of Calculating the Lengths of Profile Cutters and Their Templates,"
Stanki i Instrument, 17, Nos. 2-3, 1946

217 BUS 4 11 IN, A.V.

PHASE I RADIATION SOV/1297
Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po priimeneniyu
radiomitivnykh i stabil'nykh izotopov i izlucheniya v narodnoye
khozaystvo i nauku, Moscow, 1957

Poleznye izotopy. Moshchnye gamma-ustanovki. Radiometriya
i dosimetriya; trudy konferentsii. (Isotope Production
and Dosimetry; Transactions of the All-Union Conference on Isotope
Production and Dosimetry; Proceedings of the All-Union Conference on Isotope
Production and Dosimetry) Moscow, Izd-vo AN SSSR, 1956. 293 p.
5,000 copies printed.

Sponsoring Agency: Ministerstvo nauki SSSR; Glavnoye upravleniye po
ispol'zovaniyu atomnoy energii SSSR.

Editorial Board: Prolov, Yu.S. (Resp. Ed.), Zhavoronkov, M.M.,
(Deputy Resp. Ed.), Aglintsa, K.K., Alekseyev, B.A., Bochkarev,
V.V., Lashchinskiy, M.I., Melko, T.P., Sintayn, V.I., and
Popova, O.L. (Secretary); Tech. Ed.: Novichkov, M.D.

PURPOSE: This collection is published for scientists, technologists,
persons engaged in medicine or medical research, and others con-
cerned with the production and/or use of radioactive and stable
isotopes and radiation.

COVERAGE: Thirty-eight reports are included in this collection
under three main subject divisions: 1) production of isotopes
2) high-energy gamma-radiation facilities, and 3) radiometry and
dosimetry.

TABLE OF CONTENTS:

PART I. PRODUCTION OF ISOTOPES

Prolov, Yu.S., V.V. Bochkarev, and Ye.Ye. Kulish. Development of
Isotope Production in the Soviet Union. This report is a general survey of production methods,
apparatus, raw materials, applications, investigations,
and future prospects for radio isotopes in the Soviet Union.
Card 2/12

Babushkin, A.V., I.V. Vovnenetskaya, M.G. Zhurov, V.I.
Zatulovskiy and Yu.L. Khmel'nitskiy. Laboratory
Employing Cobalt Emitters

189

Zatulovskiy, V.I. Sources of Ionizing Radiation for Use
in Radiation Chemistry

193

Pertsotskiy, Ye.S., A.V. Biberger', and U.Ya. Margulis.
A Pilot Plant Installation for the Radiation Disin-
fection of Grain

200

Chernyshev, M.D. Gamma-Radiators for the Preservation of
Food Products

206

PART III. RADIOLOGY AND DOSIMETRY

Adrova, N.A., M.M. Koton, Yu.N. Panov. Utilizing Scintilla-
ting Plastics to Register Radioactive Emissions

213

Gol'bek, G.R., and A.M. Vyal'shin. Using Soviet Germanium
Transistors in Building Radiometric Equipment

220

HABUSHKIN, A.V.

Mechanization of metal sorting and packing in the continuous rolling mill process. Metallurg 5 no.11:29-30 N '60. (MIRA 13:10)

1. Zamestitel' nachal'nika sortoprokatnogo tsekha Kuznetskogo metallurgicheskogo kombinata.
(Rolling mills--Equipment and supplies)

BABUSHKIN, A. L.

25(2)

PHASE I BOOK EXPLOITATION

SOV/2005

Yermolayev, Konstantin Pavlovich, and Aleksey Zakharovich Babushkin

Elektromagnitnyye i magnitnyye plity metallovezhushchikh stankov; proizvodstvo, ekspluatatsiya i remont (Electromagnetic and Permanent-Magnetic Chucks for Machine Tools; Manufacture, Operation, and Repair) Moscow, Mashgiz, 1959. 106 p. Errata slip inserted. 4,000 copies printed.

Reviewer: I.K. Chichilo, Engineer; Ed.: P.A. Kunin, Engineer; Tech. Ed.: G.V. Smirnova; Managing Ed. for Literature on Metalworking and Machine-Tool Manufacturing: R.D. Beyzel'man, Engineer.

PURPOSE: This book is intended for engineers, designers, and shop personnel.

COVERAGE: The book provides the information necessary for the design and manufacture of new and rebuilt electromagnetic and permanent magnet chucks. It describes the manufacture of chuck parts as well as the assembly and testing of chucks. The authors describe the

Card 1/4

Electromagnetic and Permanent-Magnetic (Cont.)

SOV/2005

manufacturing process for electromagnetic and permanent-magnetic chucks used in metal-cutting machines, particularly as it has been developed at the Moskovskiy zavod shlifoval'nykh stankov (Moscow Grinding Machinery Plant). No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Introduction	3
I. Basic Types and Purpose of Electromagnetic and Permanent-Magnet Chucks	4
II. Various Designs of Electromagnetic and Permanent-Magnet Chucks	8
1. Chucks for machines with rotary table	8
2. Rectangular electromagnetic and permanent-magnet chucks for machines with reciprocating motion of tables	20
III. Technology of the Manufacture of Coils and Basic Parts of Electromagnetic Chucks	28
1. Engineering features of electromagnetic chucks	28

Card 2/4

Electromagnetic and Permanent-Magnetic (Cont.)	SOV/2005
2. Manufacture of coils	29
3. Production flow sheets for component parts of chucks	36
IV. Diamagnetic Compounds (Alloys) for Filling Slots of Electromagnetic and Permanent-Magnet Chucks	65
1. Purpose of diamagnetic slots and compounds used to fill them	65
2. Technique of pressing brass strips into the slots of V-type chucks for the machine tool model 3756	71
V. Electrical Wiring and Assembly of Electromagnetic Chucks	72
VI. Special Magnetic Chucks	78
VII. Testing, Control and Methods of Eliminating Defects in Magnetic and Electromagnetic Chucks	82
Card 3/4	

EXCERPTA MEDICA Sec 2 Vol 12/1 Physiology Jan 59

387. RESPIRATION AND GASEOUS EXCHANGE IN MAN SUBJECTED TO
RADIAL ACCELERATION (Russian text) - Babushkin B. I., Isakov
P. K., Malkin V. B. and Usatchev V. V. Moscow - FIZIOL. ZH.
SSSR 1958, 44/4 (342-347) Graphs 1 Tables 5

In 5 healthy men from 20 to 25 yr., radial acceleration from 4 to 6 g increased pulmonary ventilation, O_2 consumption, and CO_2 excretion, parallel to the degree of acceleration. The increase of pulmonary ventilation exceeded somewhat that of the O_2 consumption so that the percentage of O_2 in the expired air increased. The effect of acceleration was quite considerable; at 5 g the increase of pulmonary ventilation above the resting level was about 100%, and the recovery was slow (5

387

to 10 min.), Pressure suits reduced the extent of respiratory changes under acceleration.
Simonson - Minneapolis, Minn.

PABUSHKIN, B. V. and RAPINOVICH, P. V.

"Regulation of the Rate of the Cooling of Castings in Moulds"

report presented at the 7th Conference on the Interaction of the Casting Mould and the Casting, sponsored by the Inst. of Mechanical Engineering, Acad. Sci. USSR, 25-28 January 1961.

BABUSHKIN, B.V.; RABINOVICH, B.V.

Regulating the cooling of castings in foundry molds. Lit. proizv.
no. 11:24-27 N '62. (MIRA 15:12)
(Founding) (Thermal stresses)

BABUSHKIN, B.V.; BOBRYAKOV, G.I.; PAVLYUK, V.A.

Coremaking with solidification in hot boxes. Lit.proizv. no.4:6-7
Ap '63. (MIRA 16:4)

(Coremaking)

39695

S/051/62/013/001/017/019

E032/E114

24,7000

AUTHOR: Babushkin, F.A.

TITLE: Radiative transitions - a relativistic treatment

PERIODICAL: Optika i spektroskopiya, v.13, no.1, 1962, 141-143

TEXT: The author makes use of an expression given by A.I. Akhiezer and V.B. Berestetskiy (Kvantovaya elektrodinamika, Quantum Electrodynamics, Fizmatgiz, Moscow, 1959) for the probability of emission of a photon to calculate the emission probability for an electric multipole in the case of transitions between discrete states. The non-relativistic expression for the probability of dipole transitions $n, \ell \rightarrow n-1, \ell-1$ is then deduced from the general expression and numerical values for the average oscillator strengths are computed. The latter are found to be in agreement with the results obtained by W. Payne and L. Levinger (Phys. Rev., 101, 1956, 1020) for heavy elements. For light elements there is a disagreement. The present treatment applies to any multipole order, whereas the theory given by Payne and Levinger is said to apply to low multipole orders

Card 1/2

Radiative transition in a ...

S/051/62/013/001/017/019
E032/E114

only. Relativistic oscillator strengths turn out to be lower than the non-relativistic strengths. The relative intensity of the K_{α_1} and K_{α_2} lines of tungsten computed from the formulae now derived turns out to be 1.87, i.e. 100:53 rather than 100:47 which was reported by W. Kliever (Phys. Rev., 56, 1939, 387). There is 1 table.

SUBMITTED: January 15, 1962

Card 2/2

S/056/62/042/006/027/047
B104/B108

AUTHOR: Babushkin, F. A.

TITLE: Consideration of the finite size of the nucleus in isotopic shift

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 6, 1962, 1604 - 1607

TEXT: The binding energy of the electron is considered in the calculation of the energy level shift caused by the finite nuclear dimensions; this shift can be described by the values of the electron wave functions at the boundary of the nucleus (E. K. Broch. Arch. Meth. og Nat., 48, 25, 1945). With the aid of the Dirac wave functions,

$$\delta(\Delta E) = \left(\frac{2Z}{Na_0} \right)^{2\gamma+1} \frac{2\gamma\hbar c \Gamma(2\gamma + n' + 1) \sqrt{1 - \epsilon^2} r_0^{2\gamma} A^{(2\gamma-3)/2}}{4N(N-n)(n')! [\Gamma(2\gamma + 1)]^2} \times$$

$$\times \frac{LD_+ \mp e_0 MD_+}{LA_+ \mp e_0 MA_+} (A_+ D_- - A_- D_+) \delta A, \quad (10)$$

Card 1/2 2

Consideration of the ...

S/056/62/042/006/027/047
B104/B108

is obtained for the isotopic shift, where A is the proton mass number and $r_0 = 1.2 \cdot 10^{-13}$ cm. The results obtained with (10) are compared in the table with results found by M. Wertheim and G. Igo (Phys. Rev., 98, 1, 1955). ✓
The shielding was considered according to Slater (Phys. Rev., 36, 57, 1930).
The results are within the accuracy of experimental data obtained by G. Rogosa and G. Schwarz (Phys. Rev., 92, 1434, 1953). There is 1 table.

ASSOCIATION: Komi gosudarstvennyy pedagogicheskiy institut (Komi State Pedagogical Institute)

SUBMITTED: January 5, 1962

Card 2/0 2

BABUSHKIN, F.A.

Identity of the computation methods for the isotopic displacement
of spectral lines. Opt. i spektr. 15 no.3:432-434 S '63.
(MIRA 16:10)

ACCESSION NR: AP4009453

S/0051/63/015/006/0721/0725

AUTHOR: Babushkin, F.A.

TITLE: Isotope shift in x-ray spectra

SOURCE: Optika i spektroskopiya, v.15, no.6, 1963, 721-725

TOPIC TAGS: isotope shift, x ray spectrum, $1s_{1/2}$ line, heavy nuclei

ABSTRACT: Although isotope shifts, analogous to those observed for visible spectrum lines, should exist in x-ray spectra, so far they have not been detected. Investigation of x-ray spectrum isotope shifts could yield information on the size of nuclei and some radiation phenomena dependent on nuclear size. The formulas for calculating isotope shifts of optical lines are not suitable for x-ray emission lines inasmuch as the pertinent Breit-Rosenthal wave functions are written on the assumption that the electron binding energy is negligible compared with the electron's intrinsic energy, which is not admissible for x-ray terms. Accordingly, the author derives expressions for the shift of the $1s_{1/2}$ levels, using the wave functions deduced earlier by him (F.A.Babushkin, ZhETF, 42, 1604, 1962), which are free of the above restricting assumption. The adduced formulas have been used to calculate the

Card^{1/2}

L 10203-63

EW(1)/BDS--AFFTC/ASD

ACCESSION NR: AP3000065

S/0056/63/044/005/1661/1667

AUTHOR: Babushkin F. A.

50

TITLE: Isotopic shift of spectral lines 7\

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 44, no. 5, 1963, 1661-1667

TOPIC TAGS: Nuclear structure theory, isotopic shift, spectral lines, nuclear compressibility, deformation of nuclei

ABSTRACT: A formula for the isotopic shift constant is derived by applying the Sommerfeld method of determining the wave functions, with account of the finite size of the nucleus. The calculations are carried out for two nuclear charge distributions, a uniform one and a trapezoidal one. In comparing the experimental and theoretical values, two empirical parameters are introduced to characterize the nuclear compressibility, the regular compressibility coefficients $\eta = 0.7$ and the deformation compressibility coefficient $\chi = -5/8 \pi$. The comparison between the experimental and theoretical values shows good agreement for spherical and weakly-deformed nuclei. Complete agreement for

Card 1/2

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ACCESSION NR: AP3000065

strongly deformed nuclei (Sm, Eu) could not be obtained. This is most probably due to the approximate character of the calculations, where only the square of the deformation parameter was taken into account. Higher powers of this parameter must be included for large deformations. Moreover, it is possible that the deviations for some pairs of isotopes (Ce, Nd, W) arise from incorrect values of the deformation parameter. Orig. art. has: 15 formulas, 2 tables.

ASSOCIATION: none

SUBMITTED: 20Dec62 DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: PH

NR REF SOV: 006

OTHER: 026

bm/Keb
Card 2/2

BABUSHKIN, F.A.

Effect of deformations of atomic nuclei on the isotopic displacement
of spectral lines. Zhur. eksp. i teor. fiz. 45 no.5:1479-1483
N '63. (MIRA 17:1)

BABUSHKIN, Feliks Aleksandrovich

Relativistic consideration of radiation transition.
Acta physica Pol 25 no.5:749-755 My '64.

1. SSSR, Komi ASSR, Syktyvkar, Komi State Pedagogic
Institute.

1-55 EWA(K)/EWT(1)/EWT(M)/EWT(N) DIAAF

ACCESSION NR: AP5006505

8/0056/65/048/002/0561/0564

AUTHOR: Babushkin, F. A.

TITLE: Effect of the finite size of the nucleus on the intensity of characteristic
X-rays

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 2, 1965,
561-564

TOPIC TAGS: x ray line, uranium, oscillator strength, radiation intensity, multi-
pole transition, transition probability

ABSTRACT: An expression is derived for the probability of relativistic radiative electric multipole transition. This expression, unlike earlier expressions derived by the author (Acta Phys. Polon. v. 25, 749, 1964; Optika i spektroskopiya v. 13, 141, 1962), is not based on an approximate expression for the photon potential. The expression for the probability is derived by standard quantum mechanical methods, using relativistic Dirac functions for the initial and final state wave functions. The results are used to calculate the oscillator strengths of the

Cord 1/2

L 34490-65

ACCESSION NR: AP006505

transitions $K \rightarrow L_{II}$ and $K \rightarrow L_{III}$ in heavy elements, and the relative intensity of the $K\alpha$ line in the x-ray characteristic radiation. The oscillator strengths were calculated with the aid of the Thomas-Reiche-Kuhn sum rule, taking into account the finite dimensions of the nucleus. The results for the $K\alpha$ transition are: without and with account taken of the finite nuclear dimensions for the oscillator strength of the $1s_{1/2} \rightarrow 2p_{1/2}$ transition are respectively 0.100075 and 0.108658. The corresponding intensities are 57.3% and 57.41%. The results indicate that the finite nuclear dimensions have a very small influence on the x-ray intensity. It is noted that present-day experimental accuracy yields no additional information on the nuclear dimensions and the charge distribution in the nucleus. Orig. art. has: 3 figures, 6 formulas, and 1 table. [02]

ASSOCIATION: none

SUBMITTED: 11Jul64

ENCL: 00

SUB CODE: KP, OP

NO RESOV: 005

OTHER: 002

ATD PRESS: 3213

Card 2/2

L 64958-65 EWT(1)

ACCESSION NR: AP4041476

PO/0045/64/025/005/0749/0755

AUTHOR: Babushkin, Feliks Aleksandrovich 44,55

TITLE: Relativistic treatment of radiative transitions 21,44,55

SOURCE: Acta physica polonica, v. 25, no. 5, 1964, 749-755

TOPIC TAGS: radiative transition, relativistic Dirac wave function, multipole radiative transition, electric dipole transition

ABSTRACT: The author derives general expressions for the transition probabilities and oscillator strengths of electric and magnetic multipole radiative transitions using the relativistic Dirac wave functions. A former work on this subject is reviewed and the shortcomings are indicated. Numerical calculations are made. Table I of the Enclosure shows calculated results of the electric dipole transitions $1s_{1/2} \rightarrow 2p_{1/2}$, $1s_{1/2} \rightarrow 2p_{3/2}$

and the magnetic dipole transition $1s_{1/2} \rightarrow 2s_{1/2}$ for the elements ^{26}Fe , ^{47}Ag , ^{74}W , ^{78}Pt , ^{82}Pb , and ^{92}U . The results are compared with experimental data, and are discussed in the light of past work. Orig. art. has: 1 table and 24 formulas.

Card 1/3

L 64958-65

ACCESSION NR: AP4041476

ASSOCIATION: Komi Gosudarstvennyy pedagogicheskiy institut, Syktyvkar, Komi ASSR
(Komi State Pedagogical Institute) 44, 55

SUBMITTED: 18Oct63

ENCL: 01

SUB CODE: EM

NO REF SOV: 002

OTHER: 007

Card 2/3

L 64958-65

ACCESSION NR: AP4041476

ENCLOSURE: 01

0

TABLE 1

Element	$f_{1,1/2} - 2f_{1,1}$	$f_{1,1/2} - 2f_{1,2}$	$f_{1,1/2} - 2f_{1,3}$	$(I_{a_1}:I_{a_2}:I_{1,1/2} - 2I_{1,1})$ theor.	$(I_{a_1}:I_{a_2})$ exptl.
26	0,2694	0,1346	$1,772 \cdot 10^{-7}$	$100:49,6:6,5 \cdot 10^{-3}$	100:50,0 ¹
47	0,2514	0,1252	$6,416 \cdot 10^{-8}$	$100:48,3:2,5 \cdot 10^{-3}$	100:49,9 ¹
74	0,2123	0,1056	$1,106 \cdot 10^{-4}$	$100:45,8:4,8 \cdot 10^{-3}$	100:53,2
78	0,2050	0,1020	$1,514 \cdot 10^{-4}$	$100:45,4:6,7 \cdot 10^{-3}$	100:53,6
82	0,1671	0,0981	$2,121 \cdot 10^{-4}$	$100:44,9:9,7 \cdot 10^{-3}$	100:53,2
92	0,1756	0,0879	$4,664 \cdot 10^{-4}$	100:43,7:0,23	100:55,3

Card

3/3

L 3923-66 EWT(1) IJP(c)
ACCESSION NR: AP5017887

UR/0051/65/019/001/0003/0005
537.531:535.2

20
B

AUTHOR: Babushkin, F. A.

44.65

TITLE: Relativistic radiative transitions

21, 44.55

SOURCE: Optika i spektroskopiya, v. 19, no. 1, 1965, 3-5

TOPIC TAGS: optic transition, x ray emission, relativistic quantum mechanics

ABSTRACT: A mathematical expression previously derived by the author (ZhETF v. 48, 561, 1965) for the probability of electric multipole transitions is transformed and used to calculate the relative intensities of x-ray transitions in the K series for heavy elements. Screening is corrected for by Slater's rule. Comparison with the results of O. Beckman (Ark. Fys. v. 9, 495, 1955) shows some discrepancy between the theoretical and experimental values of the relative intensities of the $K\alpha_2$ lines, the disagreement increasing as Z increases. This may be due to the effect of the finite dimensions of the nucleus and to the fact that Slater's rule is only approximate for the higher electron shells. Orig. art. has: 4 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 16Aug63

NR REF SOV: 003

Card 1/1

ENCL: 00

OTHER: 007

SUB CODE: OP

L 11817-66 EWT(1) LHB

ACC NR: AP600165

SOURCE CODE: UR/0051/65/019/006/0978/0979

AUTHOR: Babushkin, F. A.

ORG: None

TITLE: Directional correlations for cascade transitions in characteristic X-ray emission

SOURCE: Optika i spektroskopiya, v. 19, no. 6, 1965, 978-979

TOPIC TAGS: atomic structure, electron shell, electron hole, hole mobility, x ray emission

ABSTRACT: A vacancy (hole) formed in the inner shells of an atom is shifted to the outer shell. Disintegration of the vacancy in the K shell is mainly the result of radiation, and as the vacancy approaches the periphery of the atom the Auger effect becomes increasingly predominant. As a result, hole transitions in the inner shells must give rise to cascade X-ray quanta. The most probable cascades are specified in the present article. In atoms which have the outer shell filled, the moment of the atom is determined by the moment of the hole, because a hole in a filled shell behaves exactly as an electron in the shell. The problem is formulated so as to obtain the same formal mathematical scheme as in the case of cascade nuclear or mesoatomic transitions, although the physical problem is somewhat different. The inevitable presence of correlations between the emission directions of sequential X-ray quanta and their polarizations is demonstrated in this way. The formula expressing the correlation function (averaged for polarization) of two sequential X-ray quanta for the

Card 1/2

UDC: 537.531.001.1

L 11817-66

ACC NR: AP6001657

cascades under consideration is presented and discussed: Orig. art. has: 1 formula.

SUB CODE: 20 / SUBM DATE: 29Mar65 / ORIG REF: 002

beh
Card 2/2

L 16992-66 EWT(1)

ACC NR: AP5024618

SOURCE CODE: PO/0045/65/028/003/0427/0431

AUTHOR: Babushkin, F. A.

ORG: Komi State Pedagogical Institute, SSSR (Komi gosudarstvennyy pedagogichesky institut SSSR)

TITLE: Electric multipole relativistic radiative transition

SOURCE: Acta physica polonica, v. 28, no. 3, 1965, 427-431

TOPIC TAGS: radiative transition, multipole transition

ABSTRACT: A formula is derived for the probability of electric multipole transitions in a single-electron relativistic approximation. It is proven that the probability of radiative transitions is independent of the choice of the calibration constant in the formula of photon potential; the proof is valid for the general case. The use of nonrelativistic wave functions and nonrelativistic formulas for the radiative-transition probability in high-accuracy calculations of radiative transitions in hydrogen (R. Herdan et al., Astrophys. J., 133, 294, 1961) is criticized. It is suggested that in such calculations: (1) The relativistic wave functions and formulas

Card 1/2

L 16992-66

ACC NR: AP5024618

be used; (2) The delay effect be allowed for. These corrections will be felt, first of all, in the transitions between the lower energy states of the electron. The author also questions the accuracy of the probability ratio (0.5) of radiative transitions in mesoatoms because this ratio was obtained by different sources on the basis of non-relativistic formulas. Orig. art. has: 18 formulas.

SUB CODE: 20 / SUBM DATE: 27Feb65 / ORIG REF: 001 / OTH REF: 004

Card 2/2 7/95

BERMAN, F.L.; ZHEMCHUZHIN, G.D.; BABUSHKIN, F.V.

Mechanization of the processes of grinding and screening of
powders. Prom. khim. reak. i osobo chist. veshch. no.1:
34-35 '63. (MIRA 17:2)

BABUSHKIN, F.Z.; FEYDEROV, D.Ya.

Dehydrating fuel oil by the heat of industrial furnace waste gases.
Stal' 18 no.8:753-754 Ag '58. (MIRA 11:8)
(Waste heat) (Petroleum products)

BABUSHKIN, G.A., starshiy leytenant meditsinskoy sluzhby.

Catarrhs of the upper respiratory tract. Voen.-med. zhur. no.9:
84-85 S '51. (MIRA 9:9)
(RESPIRATORY ORGANS--DISEASES)

AUTHORS: Babushkin, F.Z. and Feyderov, D.Ya. SOV/133-58-8-26/30
TITLE: Dehydration of Fuel Oil by Using the Waste Heat of Flue
Gases of Industrial Furnaces (Obezvozhivaniye mazuta
teplom otkhodyashchikh gazov promyshlennykh pechey)
PERIODICAL: Stal', 1958, Nr 8, pp 753 - 755 (USSR)
ABSTRACT: As a direct steam is often used for the transfer from rail
tanks of fuel oils and tars with high solidification points,
their moisture content increases to 12-19% which sharply
decreases the efficiency of operation of industrial
furnaces and, in particular, open-hearth furnaces. The use
of waste heat of flue gases from industrial furnaces for
the dehydration of fuel oil is proposed. The experimental
plant was designed (under the direction of A.S.Tochinskiy)
in 1948 and operated successfully on dehydration of
producer tar containing 40-45% of water. The moisture
content can be reduced to 3-4%. A number of such
installations were in successful operation for a number
of years, including one operating on the dehydration of
fuel oil, reducing the moisture content from 10-12% to
2-2.5%. The principle of operation: oil is sprayed on
the top of a scrubber and a hot waste gas is blown into
the bottom of the scrubber, thus waste gas passing through

Card1/2

SOV/133-58-8-26/30
Dehydration of Fuel Oil by Using the Waste Heat of Flue Gases of
Industrial Furnaces

the scrubber becomes saturated with water vapour and is blown off into the atmosphere at the top of the scrubber. The oil is re-circulated until a desired reduction in the moisture content is attained. A description of the design and operating conditions of the scrubber is given. Complete de-hydration of oil should be avoided in view of fire risks. It is stated in the editorial note that the real solution of the problem is fitting the railway tanks with heating elements (indirect steam) so that the use of direct steam would be unnecessary. As a temporary measure, the use of the above described installation may be advantageous in some cases. There are 2 figures.

Card2/2 1. Fuel oils--Dehydration 2. Waste gases--Applications
3. Dehydrators--Design

1. BABUSHKIN, G. A.
2. USSR (600)
4. Dysentery
7. Therapy of dysentery in children with phytonoides. *Pediatrilia* no. 6: 1952

In this brief article the author describes his expt of using garlic to treat dysentery in children. The treatment consisted of an administration of an infusion of a garlic enema to the sicj children, in addition to the usual treatment with sulfa drugs, vitamins, etc. The author states that the limited scope of the expt could not establish any definite results. He assumes, tentatively, that children suffering from a sub-acute stage of dysentery derived some benefit from the garlic treatment. No effect was noticed in cases of acute or chronic dysentery.

256T49

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

BABUSHKIN, I.

State farm in the birch grove. Tekh. mol. 23 no.2:5-8 F '55.
(MLRA 8:4)

1. Direktor sovkhoza "Berezovskiy".
(Altai Territory--State farms)

BABUSHKIN, I. N.

Dissertation: "Physicogeographical Characteristics of the Southeastern Part of the Central Chernozem Zone." Cand Geog Sci, Moscow State Pedagogical Inst, Moscow, 1953. (Referativnyy Zhurnal--Geologiya/Geografiya, Moscow, Aug 54)

SO: SUM 393, 28 Feb 1955

BABUSHKIN, Ivan Nikitich; SHIBANOVA, A.A., red.; KOVALENKO, V.L.,
tekhn. red.

[Comprehensive field practice in physical geography; for
the third and fourth year correspondence school students
of the geography faculties of pedagogical institutes] Kom-
pleksnaia polevaia praktika po fizicheskoi geografii; dlia
studentov-zaochnikov III i IV kursov geograficheskikh fa-
kul'tetov pedagogicheskikh institutov. Moskva, Uchpedgiz,
1963. 77 p. (MIRA 17:3)

BABUSHKIN, I. N. and PATSIORA, P. P.

The PES-12 Mobile Electric Power Station and Cable Network (Peredvizhnaya elektrostantsiya PES-12 i kabel'naya set'), Goslesbumizdat, 1949, 157 pp.

EABUSHKIN, I. N.

N/5
729.412
.M5

Lesotransportnyye Tyagobyie Mashiny (Traction Machinery in Timber
Hauling) B6 I. A. Men'shikov (and) I. N. Eabushkin. Moskva, Goslesbumi-
zdat, 1951.

v.

Lib. has: v. 1

REF ID: A66666

MEN'SHIKOV, I.A., prof., doktor tekhnicheskikh nauk; BABUSHKIN, I.N., dots. kand.tekhn.nauk; VORONITSYN, K.I., dots., kand.tekhn. nauk, laureat Stalinskoy premii, retsenzent; GOL'DBERG, A.M., dots., kand.tekhn.nauk, retsenzent; BRILING, N.R., zasluzhennyy deyatel' nauki i tekhniki, prof., doktor tekhn.nauk. SHENDAREVA, L.V., tekhn.red.

[Lumber transport traction machinery] Lesotransportnye tiagovye mashiny. Moskva, Gosleshumizdat. Pt.1. 1951. 586 p. (MIRA 11:2)
(Lumber--Machinery) (Traction engines)

BABUSHKIN I. N.

VOZNESENSKIY, Nikolay Petrovich, prof., doktor tekhn.nauk; ZAYCHIK, Gertsel'
Il'ich, prof., doktor tekhn.nauk; KOGAN, Yu.A., kand.tekhn.nauk,
dots., retsenzent; BABUSHKIN, I.N., red.; PITERMAN, Ye.L., red.
izd-va; GORYUNOVA, L.K., red.izd-va; SHITS, V.P., tekhn.red.

[Logging tractors and trucks] Lesovoznye traktory i avtomobili.
Moskva, Goslesbunizdat. Pt.1. [Heavy machinery] Tiagovye mashiny.
1958. 439 p. (MIRA 11:6)
(Tractors) (Motortrucks)

YERAKHTIN, Dmitriy Dmitriyevich, dots., kand. tekhn. nauk; GOKHMAN, Shlema Moiseyevich, kand. tekhn. nauk; DVINYANINOV, Vistor Nikolayevich, st. prepodavatel'; ZAYTSEV, Pavel Alekseyevich, inzh.; LOPATIN, Anton Venediktovich, dots.; ORLOV, Nikolay Mikhaylovich, inzh.; STRATANOVICH, Nikolay Nikolayevich, inzh.; STRIGANOV, Nikolay Ignat'yevich, inzh.; TIKHONOV, Nikolay Prokop'yevich, dots., kand. tekhn. nauk; RAYKHLIN, Zaliman Tanfilovich, st. prepodavatel'; BELOV, Aleksandr Yemel'novich, dots.; RESHETNIKOV, N.S., dotsent, retsenzents; BABUSHKIN, I.N., red.; PITERMAN, Ye.L., red.izd-va; PARAKHINA, N.L., tekhn. red.

[Repair of lumbering and forestry machinery] Remong lesozagotovitel'nykh i lesokhoziaistvennykh mashin. By D.D.Erakhtin i dr. Moskva, Goslesbumizdat, 1961. 436 p. (MIRA 15:2)

1. Kafedra remonta Moskovskogo lesotekhnicheskogo instituta (for Reshetnikov).

(Forests and forestry—Equipment and supplies)

(Lumbering—Machinery)

BABUSHKIN, Ivan Nikolayevich; FAKEYEV, A.D., inzh., retsenzent;
SECRETININ, I.P., inzh., red.

[Technology of the repair of lumbering and forestry machines]
Tekhnologiya remonta lesozagotovitel'nykh i lesokhoziaistven-
nykh mashin. Moskva, Goslesbumizdat, 1963. 382 p.

(MIRA 17:6)

BABUSHKIN, I.N.

Use of extracts from placental and abortion blood for the
preparation of nutrient media. Lab. delo no. 12:741-743 '64.
(MIRA 18:1)

1. Otdel osobo opasnykh infektsiy Dnepropetrovskoy oblastnoy
sanitarno-epidemiologicheskoy stantsii.

BAMBI

report and some results of works in agronomy in Central
Am. Inst. Agr. Sci. and Tech. Hydrometeor. Inst. no. 2410-81
(MIRA 13:10)

BABUSHKIN, K.N.

ANDREYEV, V.P., polkovnik.; BORISOV, D.S., polkovnik.; YEVTUSHENKO, A.F., polkovnik.; ZHELEZNYKH, V.I., dots., kand. tekhn. nauk, general-leytenant inzhenernykh voysk, otv. red.; TSIRLIN, A.D., doktor voyennikh nauk, general-polkovnik inzhenernykh voysk, red.; NAZAROV, K.S., dots., general-polkovnik inzhenernykh voysk v ostavke, red.; BADANIN, B.V., polkovnik v zapase, red.; BABUSHKIN, K.N., polkovnik, red.; TSEGENKO, P.G., polkovnik, red.; YEMEL'YANOV, P.A., polkovnik, red.; DROZHZHINOV, Ye.G., polkovnik, red.; PAKHOMOV, V.Ya., polkovnik, red.; SMIRNOV, V.V., polkovnik, red.; GORCHAKOV, A.D., podpolkovnik, red.; MEDNIKOVA, A.N., tekhn. red.

[Engineers of the Soviet Army in important operations of the Great Patriotic War; a collection of articles] Inzhenernye voiska Sovetskoi armii v vazhneishikh operatsiyakh Velikoi Otechestvennoi voyny; sbornik statei. Moskva, Voen. izd-vo M-va obor. SSSR, 1958. 309 p. (MIRA 11:12)

(World War, 1939-1945--Engineering and construction)

KIM, L., kand. tekhn. nauk; BABUSHKIN, L., inzh.; LOKSHIN, L., inzh.

Heat treatment of monolithic joints of panels by ferromagnetic
heaters. Zhil. stroi. no.9:26-27 '65. (MIRA 18:11)

BAKHVALOV, L.I.

BAKHVALOV, Sergey Vladimirovich; BABUSHKIN, Lev Ivanovich; IVANITSKAYA, Valentina Pavlovna; OSTIANU, N.M., red.; NATAPOV, M.I., tekhn. red.

[Analytic geometry; a manual for teachers' colleges] Analiticheskaya geometriia; uchebnik dlia pedagogicheskikh institutov. Pod red. S.V. Bakhvalova. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1958. 326 p. (MIRA 11:7)

(Geometry, Analytic)

BAKHVALOVA, SERGEY VLADIMIROVICH

PHASE I BOOK EXPLOITATION 795

Bakhvalov, Sergey Vladimirovich; Babushkin, Lev Ivanovich, and Ivanitskaya, Valentina Pavlovna

Analiticheskaya geometriya; uchebnik dlya pedagogicheskikh institutov (Analytic Geometry; a Textbook for Pedagogical Institutes) Moscow, Uchpedgiz, 1958. 326 p. 25,000 copies printed.

Ed. (title page): Bakhvalova, S.V.; Ed. (inside book): Ostianu, N.M.; Tech. Ed.: Natanov, M.I.

PURPOSE: This book is approved by the Ministry of Education of the RSFSR as a textbook for students at pedagogical institutes, although certain problems exceed the requirements of such a course.

COVERAGE: The book is a text for a classical course in plane and solid analytic geometry. The book deals with basic elements of analytic geometry. More extensive theories of conics and of

Card 1/13

Analytic Geometry (Cont.)

795

quadric surfaces are presented. Fundamentals of vector algebra are given, which are applied to certain problems of the theory of a straight line and to coordinate transformations. Although there is no presentation of equations in vector form, certain equations in Cartesian coordinates are derived with the aid of vector algebra. No personalities are mentioned. There are 6 Soviet references.

TABLE OF CONTENTS:

Preface	3
Introduction	4

PART 1. STRAIGHT-LINE AND PLANE ANALYTIC GEOMETRY

Ch. I. Straight-line Geometry	
1. Ray. Direction of a ray [Directed line]	5
2. Determination of the position of a point on a straight line with the aid of coordinates	6

Card 2/ 13

BAKHVALOV, Sergey Vladimirovich; BABUSHKIN, Lev Ivanovich; IVANITSKAYA, Valentina Pavlovna; DOLGOPOLOV, V.G., red.; SMIRNOVA, M.I., tekhn. red.

[Analytic geometry; textbook for pedagogical institutes] Analiticheskaya geometriya; uchebnik dlia pedagogicheskikh institutov. Pod red. S.V. Bakhvalova. Izd. 2., perer. Moskva, Uchpedgiz, 1962. 367 p. (MIRA 16:2)
(Geometry, Analytic)

BAKHVALOV, Sergey Vladimirovich; BABUSHKIN, Lev Ivanovich;
IVANITSKAYA, Valentina Pavlovna; DOLGGPALOV, V.G., red.;
SMIRNOVA, M.I., tekhn. red.

[Analytic geometry] Analiticheskaya geometriya; uchebnik
dlya pedagogicheskikh institutov. Izd.2., perer. Mo-
skva, Uchpedgiz, 1962. 367 p. (MIRA 16:10)
(Geometry, Analytic)

BABUSHKIN, L.I.

Analytic proof of a theorem in plane geometry. Uch. zap. MOPI
123:509-514 '63. (MIRA 17:4)

BAKHVALOV, Sergey Vladimirovich; BABISHKIN, Lev Ivanovich;
IVANITSKAYA, Valentina Pavlovna; DOLGOPOLOV, V.G., red.

[Analytic geometry; textbook for pedagogical institutes]
Analiticheskaya geometriya; uchebnik dlia pedagogicheskikh institutov. Pod red. S.V.Bakhvalova. Izd.3. Moskva, Prosveshchenie, 1965. 367 p. (MIRA 18:12)

BABUSHKIN, L.N.

Phototaxis of chloroplasts. Priroda 42 no.8:97-99 Ag '53. (MLRA 6:7)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva Akademii nauk SSSR.
(Chromatophores)

BABUSHKIN, L.N.

Gaseous exchange of indoor plants. Priroda 42 no.11:126 H '53.
(MLRA 6:11)

1. Institut fiziologii rasteniy Akademii nauk SSSR.
(Plants--Respiration)

BABUSHKIN, I.I.

(L.N.)

Carbon dioxide fertilizers. Priroda 42 no.12:127-128 D '53. (MLRA 6:11)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva.
(Fertilizers and manures) (Carbon dioxide)

BABUSHKIN, L. N.

"The Nature of the Motion of Chloroplasts in Connection With
the Adaptation of Plants to Light Conditions." Cand Biol Sci, Inst
of Plant Physiology imeni K. A. Timiryazev, Acad Sci USSR, 12 Nov
54. (VM, 2 Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

USSR/ Agriculture

Card 1/1 Pub. 86 - 38/40

Authors : Babushkin, L. N.

Title : Feeding of plants

Periodical : Priroda 3, 125-126, Mar 1954

Abstract : In answer to an inquiry the author suggests several ways of feeding plants (not through the root) through spraying of weak solutions of mineral salts, diluted with water.

Institution : The K. A. Timiryazev Institute of Plant Physiology, USSR

Submitted :

BaBushkin, L. N.

USSR/Miscellaneous -- Preserving cut flowers

Card 1/1 : Pub. 86 - 39/40

Authors : Babushkin, L. N.

Title : On the preservation of cut flowers

Periodical : Prirod 43/3, 127-128, Apr 1954

Abstract : Directions are given for preserving cut flowers, such as the cutting of the stems at a definite angle with a sharp knife, the temperature of the room and of the water in which they are kept.

Institution : Inst. Plant Physiology im. Tsvetkov, AS USSR

Submitted :

BABUSHKIN, L. N.

USSR/Biology : Botany

Card : 1/1

Authors : Babushkin, L. N.

Title : On the causes of change in the color of flowers

Periodical : Priroda, 43/7, 103 - 104, July 1954

Abstract : The article treats of chemistry of the coloring of flowers and finds the most widely spread pigments to be anthocyanins and flavones. The effect of different constituents in the soil is dealt with as well as the causes of different coloring in the same varieties.

Institution :

Submitted :

BABUSHKIN, L.N.

Biological importance of the phototaxis of chloroplasts. Fiziol.
rast.2 no.2:97-104 Mr-Apr '55. (MLRA 8:10)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva Akademii
nauk SSSR, Moscow
(Chromatophores) (Plants, Effect of light on)

BABUSHKIN, L.N., kandidat biologicheskikh nauk

Gas resistance of plants. Priroda 44 no.8:127 Ag '55. (MIRA 8:10)
(Plants, Effect of gases on)

BABUSHKIN, L. N.

Adaptation of the phototaxis apparatus of chloroplasts to light intensities. Dokl. AN SSSR 102 no.6:1215-1218 Je '55.

(MLRA 8:10)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva Akademii nauk SSSR. Predstavleno akademikom A.L.Kursanovym
(Photosynthesis) (Chromatophores)

BABUSHKIN, L. N.

USSR/Biology - Plant physiology

Card 1/1 Pub. 22 - 43/45

Authors : Babushkin, L. N.

Title : The phototaxis spectrum of chloroplast

Periodical : Dok. AN SSSR 103/2, 333-335, Jul 11, 1955

Abstract : Experimental data are given on the spectrum of phototaxis and the movement of chloroplast in plant tissues. Eight references: 6 Germ., 1 Russ. and 1 Pol. (1867-1951). Graphs; illustration.

Institution : Acad. of Sc., USSR, Inst. of Plant Physiology im. K. A. Timiryazev

Presented by: Academician A. L. Kursanov, February 7, 1955

BABUSHKIN, L.N.

Interrelation of chloroplast phototaxis and photosynthesis. Dokl.
AN SSSR 103 no.3:507-510 J1'55. (MIRA 8:11)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva. Predstavleno
akademikom A.L.Kursanovym
(PHOTOSYNTHESIS,
relation of phototaxis of chloroplasts)
(CHLOROPHYLL
chloroplasts, relation of phototaxis to photosynthesis)

BABUSHKIN, L.N., kandidat biologicheskikh nauk (Tiraspol').

Interesting book on photosynthesis ("Nourishment of plants by light and carbon dioxide; photosynthesis." A.A. Nichiporovich. Reviewed by L.N. Babushkin). Priroda 45 no.5:119 My'56(MIRA 9:8) (Photosynthesis) (Nichiporovich, A.A.)

USSR / Cultivated Plants. Technical, Oleaceous, Sugar Bearing
Plants.

M-6

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58661

Author : Teodorovich, L. M.; Pal'min, B. A.; Babushkin, L. N.

Inst : UZ SSR Acad. Sci.

Title : Division Into Regions of the Cotton Cultivation Zone
of Uzbekistan

Orig Pub : Izv. AN UZ SSR, 1956, No 12, 3-13

Abstract : The characteristics of individual regions in the zone
of irrigated cotton cultivation are given in this paper.
They are based on indexes pertaining to the length of
the vegetation period and the sum of effective tempera-
tures. They are also in accordance with data on the
composition of the soil in Uzbekistan and its degree of
salinity. Indications as to the relative importance of
individual types of soil and areas occupied by each

Card 1/3

100

USSR / Cultivated Plants. Technical, Oleaceous, Sugar Bearing
APPROVED FOR RELEASE: 06/06/2000, CIA-RDP86-00513R000102920004-3
M-6

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58661

region, and variations in economic conditions among
the individual sections of the zone of irrigated cotton
cultivation are also given in this paper. The zone of
production specialization in the area set aside for
irrigated cotton cultivation is divided into three
subzones on the basis of the above indexes: (North
western, central and southern) and six districts
(Lower-Amu-Dar'ya, Zeravshan, Tashkent, Fergan, Kashka-
Dar'ya, Surkhan-Dar'ya). The districts are in turn
divided into subdistricts and administrative rayons.
A brief description of sub-zones and rayons from the
point of view of their climatic characteristics, soil
conditions, agricultural engineering, type of planted
varieties, and similar economic conditions, is given.
In conclusion, the conditions, under which agromeliorative

Card 2/3

USSR / Cultivated Plants. Technical, Oleaceous, Sugar Bearing

0 451/111, 1. 11.

1/Plant Physiology - Respiration and Metabolism.

I-3

Abstr Jour : Ref Zhur - Biol., No 4, 1958, 15183

Author : Babushkin L.N.

Inst : -

Title : Content of Albumins in the Leaves of Vegetable

Orig Pub : Fiziol. rasteniy, 1957, 4, No 2, 199-204

Abstract : In potatoes and tomatoes water-soluble proteins regarded as albumins were established on the basis of the difference in the percentage content of the dry substances determined on a refractometer before and after the boiling of the juice expressed from the leaves. The content of albumin increased when a variant with 1 or 2 norms of NPK was substituted for the variant without fertilizer. With an increase of the albumin content to 3.3 to 3.6% the crop yield was increased. The albumin content in the leaves of the upper layers was lower than that in the lower layers if the moisture content of the soil was 75-90% of its

Card 1/2

Moldavskaya ovshche-kartofel'naya orsitel'naya stantsiya, Tiraspol'.

BABUSHKIN, L.N.

I.

USSR/Plant Physiology - Photosynthesis.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95621

Author : Babushkin, L.N.

Inst : -

Title : New Field Method for Comparative Changes of Photosynthesis.

Orig Pub : Vestn. s.-kh. nauki, 1957, No 8, 148-150

Abstract : The method is a new modification of the known colorimetric method. Pieces of filter paper, placed during the experiment in a chamber with plant leaf cuttings, are treated with an indicator liquid. The discs of filter paper treated with the indicator liquid begin to redden in proportion to the CO₂ absorbed by the plant cuttings. The rate of their reddening indicates the intensity of photosynthesis. Composition of the indicator liquid: 15 ml water, 2.25 ml glycerin, 1 ml 12% NaOH solution and 0.45 ml 1% cresolphthalein solution. A formula is cited

Card 1/2

13/1/1957 H.R. 10/2/57

AUTHOR: Babushkin, L.N., Candidate of Biological Sciences (Tiraspol') 26-12-38/49
TITLE: Infiltration of Potato Leaves by Rain (Infil'tratsiya list'yev kartofelya dozhdem)
PERIODICAL: Priroda, 1957, # 12, p 114-115 (USSR)

ABSTRACT: After a downpour and hail showers in the district of Tiraspol' on June 22, 1955, the Moldavian experimental irrigation station for vegetable and potato growing registered a precipitation of 65 mm. When the potato plants in the various plots were examined on the next morning, many of their stalks and leaves were damaged and the latter had irregular dark spots. When examined through a microscope it was found that those spots were caused by water that had penetrated into the leaves' tissues. The infiltration had apparently been caused by the exceptionally heavy rainfall and the fact that the plants were spread on the ground with their leaves upside down. An artificially conducted infiltration showed the same results when a strong jet of water was directed towards the reverse side of potato leaves.

AVAILABLE: Library of Congress
Card 1/1

SHUL'TS, V.L., prof., otv.red.; BABUSHKIN, L.N., prof., red.; POSLAVSKAYA
O.Yu., dotsent, red.; GAL'KOV, Ch.V., starshiy prepodavatel', red.

[Kashka Darya Province] Kashkadar'inskaya oblast'. Tashkent,
Izd-vo SAGU. Vol.1. [Nature] Priroda. 1959. 279 p. (Tashkent.
Universitet. Trudy Sredneaziatskogo gosudarstvennogo universiteta,
no.155). (MIRA 14:5)

(Kashka Darya Province—Physical geography)

BABUSHKIN, L.N.

Nature of the action of variable temperatures on tomato seeds.
Fiziol.rast. 6 no.2:211-213 Mr-Ap '59. (MIRA 12:5)

1. Moldavskiy nauchno-issledovatel'skiy institut oroshayemogo
zemledeliya i ovoshchevodstva, Tiraspol.
(Tomatoes)
(Plants, Effect of temperature on)
(Seed production)

BABUSHKIN, L.N.

Diagnosing the need for watering in vegetable plants by sap
concentration. Fiziol. rast. 6 no.4:480-483 J1-Ag '59.
(MIRA 12:10)

1. Moldavian Scientific Research Institute of Irrigation Agriculture
and Vegetable Gardening.
(Potatoes--Water requirements) (Tomatoes--Water requirements)
(Sap)

BABUSHKIN, L.N.

Field transportation meter. Fiziol. rast. 7 no.4:487-491 '60.

(MIRA 13:9)

1. Moldavian Scientific Research Institute of Irrigated Agriculture
and Vegetable Growing, Tiraspol.

(Plants--Transpiration)

(Botanical apparatus)

BABUSHKIN, L.N.

Absorption of water vapor by tomato and potato leaves. Dokl. AN SSSR
134 no.6:1484-1485 O '60. (MIRA 13:10)

1. Moldavskiy nauchno-issledovatel'skiy institut oroshayemogo zem-
ledeliya i ovoshchevsostva. Predstavleno akademikom A.L.Kursanovym.
(Plants--Absorption of water) (Leaves)

BABUSHKIN, Leonid Nikolayevich; DZHORDZHIO, V.A., otv. red.; USHAKOVA, T.V.,
red.; BRAYNINA, M.I., tekhn. red.

[Agroclimatic subdivision of the cotton zone of Central Asia] Agro-
klimaticheskoe raionirovaniye khlopkovoi zony Srednei Azii. Leningrad,
Gidrometeor. izd-vo, 1960. 133 p. (MIRA 14:8)
(Soviet Central Asia—Crops and climate)

AZAT'YAN, Armen Arshavirovich; BABUSHKIN, L.N., prof., red.; TROFIMOV,
F.D., red.; AKHTYAMOVA, S., tekhn.red.

[Outstanding explorers of the nature of Central Asia: second
half of the 19th century] Vydaiushchiesia issledovateli prirody
Srednei Azii; vtoraya polovina XIX v. Pod red. L.N.Babushkina.
Tashkent, Gos.izd-vo "Sredniaya i vysshaia shkola" UzSSR. Pt.1.
1960. 170 p. (MIRA 14:2)
(Soviet Central Asia--Discovery and exploration)

TEODOROVICH, L.M.; PAL'MIN, B.A.; BABUSHKIN, L.N.

Dividing the cotton belt of Uzbekistan into districts. Izv. AN
Uz. SSR no. 12:3-13 '56. (MIRA 14:5)
(Uzbekistan—Cotton growing)

BABUSHKIN, L.N., prof., otv.red.; GAL'KOV, Ch.V., red.; LOBACH, Kh.S., red;
SMIRNOV, N.V., red.; TSAPENKO, N.G., red.

[Kashka-Darya Province] Kashka-Dar'inskaia oblast'. Tashkent, Izd-vo
SAGU, Vol.2. [Economic-geography] Ekonomiko-geograficheskaja
kharakteristika. 1959. 242 p. (Tashkent. Universitet. Trudy
Sredneaziatskogo gosudarstvennogo universiteta, no.156). (MIRA 14:5)
(Kashka-Darya Province—Economic geography)

BABUSHKIN, L.N.

Climatic characteristics. Trudy TashGU no.185 Geog. nauki no.21:
31-47 '61. (MIRA 16:8)

(Surkhan-Darya Province--Climate)

BABUSHKIN, L.N.

Principles underlying the division of Central Asia and southern
^azakhstan into agroclimatic regions. Vop. geog. no.55:131-137
'61. (MIRA 15:1)
(Soviet Central Asia--Crops and climate) (Cotton)

BABUSHKIN, L.N.; KOGAY, N.A.

Physicogeographical regionalization. Trudy TashGU no.185 Geog.
nauki no.21:199-214 '61. (MIRA 16:8)
(Surkhan-Darya Province--Physical geography)

BABUSHKIN, L.N.; DALIMOV, N.D.; KOGAY, N.A.

The physico-geographical regionalization of the Uzbek S.S.R.
Trudy TashGU no.186:77-97 '61. (MIRA 14:12)

1. Tashkentskiy gosudarstvennyy universitet imeni Lenina.
(Uzbekistan--Physical geography)

BABUSHKIN, L.N.

On the problem of the agroclimatic regionalization of the Central Asian republics. Trudy TashGU no.186:4-24 '61. (MIRA 14:12)

1. Tashkentskiy gosudarstvennyy universitet imeni Lenina.
(Soviet Central Asia--Vegetation and climate)
(Soviet Central Asia--Agricultural geography)

S/648/62/000/012/001/001
A004/A126

AUTHOR: Babushkin, L.N.

TITLE: Agrometeorological and agroclimatic indices

SOURCE: Tashkent. Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut. Trudy. no. 12 (27), 1962. Agrometeorologiya, 65 - 76

TEXT: The author presents a general survey on the quantitative agrometeorological and agroclimatic indices and on the problems connected with the determination of these indices. He points out the necessity of investigating a number of important problems concerning the relation between animal organisms and meteorological phenomena and mentions in this connection the first studies being carried out by the Kazakhskiy gidrometeorologicheskiy institut (Kazakh Hydrometeorological Institute) KazNIGMI. In the present article he deals, above all, with problems concerning vegetable organisms. It is emphasized that mere biological indices cannot always and in their entirety be applied directly, and a comparison of agrometeorological and biological (bioclimatic) indices proves the necessity

Card 1/2

Agrometeorological and agroclimatic indices

S/648/62/000/012/001/001
A004/A126

of utilizing for practical purposes special agrometeorological indices. The author enumerates the demands that should be made on agroclimatic and agrometeorological indices. There are 2 tables.

Card 2/2

KORZHENEVSKIY, N.L.; DONTSOVA, Z.N.; KHASANOV, Kh.Kh., dots.;
VASIL'KOVSKIY, N.P.; SKVORTSOV, Yu.A.; POSLAVSKAYA, O.Yu.;
KOGAY, N.A., dots.; MAMEDOV, E.D.; AKULOV, V.V.; BABUSHKIN,
L.N., prof.; SHUL'TS, V.L., prof.; GORBUNOV, B.V.; GRANITOV,
I.I.; KOSTIN, V.P.; SMIRNOV, N.V., dots.; TSAPENKO, N.G.,
dots.; DEGTYAR', V.I.; CHERNOV, P.N.; MUKMINOV, F.G.;
SELIYEVSKAYA, A.A.; RYABCHIKOV, A.M.; DALIMOV, N.D., dots.;
LOBACH, Kh.S.; TADZHIMOV, T.; ARKAD'YEVA, A.N.; GAL'KOV,
Ch.V.; SHTARKLOVA, S.I.; BESSONOV, M., red.; BAKHTIYAROV, A.,
tekhn. red.

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(Uzbekistan)

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Practice in physicogeographical regionalization of the Uzbek
S.S.R. Nauch. trudy TashGU no. 213 Geography no. 24:3-12 '63.
(MIRA 17:5)

BABUSHKIN, L.N.; PIVOVAR, L.P.

Method for evaluating the moisturing of a territory with atmospheric precipitation. Nauch. trudy TashGU no. 213 Geography no. 24: 19-31 '63. (MIRA 17:5)

EABUSHKIN, L.N.

High rates of dark absorption of carbon dioxide by tomato leaves.
Fiziol. rast. 11 no.2:240-246 Mr-Apr '64. (MIRA 17:4)

1. Moldavia Scientific Research Institute of Irrigation Farming
and Vegetable Growing, Tiraspol.

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ACCESSION NR: AR4046199

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SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 16:16

AUTHOR: Babushkin, I. N.

TITLE: Temperature effect on carbon photosynthetic metabolism

CITED SOURCE: Fiziol. rasteniy, v. 11, no. 2, 1964, 240-246

TOPIC TAGS: Elodea canadensis, temperature effect, photosynthesis, carbon, metabolism, radioactive carbon, phosphorylation

TRANSLATION: Carbon photosynthetic metabolism was investigated in Elodea canadensis in relation to temperature conditions (15, 25, 35, and 45°) by means of $\text{NaH}^{14}\text{CO}_3$, two-dimensional chromatography, and autoradiography. Increase of temperature to 45° had the same effect on carbon photosynthetic metabolism as a sharp reduction of light: a reduction in "cross section" (capacity) of the photosynthetic carbon canal which is determined first of all by the number of CO_2 acceptor molecules, a many fold increase of Cl^{14} radioactivity in alanine, and greatly inhibited formation of saccharose but not of

Card 1/2

L 22451-65

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hexose. The author considers the basic reason for these changes to be the dissociation at 45° of a means to degrade the energy of photoexcited electrons and photosynthetic phosphorylation. ATP deficiency may be a "tight spot" indicating low intensity of the total photosynthesis process. A theory is being developed that the intensity of photosynthesis depends on two variables: the rate of photosynthesis end product formation from $C^{14}O_2$ and the "cross section" of the photosynthetic carbon canal. The rate of end product formation changes in most cases according to Van't-Hoff's law. Kazanskiy universitet.

SUB CODE: LS

ENCL: 00

Card 2/2

BABUSHKIN, I.N.

Agroclimatic description of Central Asia. Nauch. trudy TashGU
no.236 Geog. nauki no.28:5-185 '64.

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